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Steve
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July 7, 1983

LOW 83-3.064

Mr. Rich Linzmaier
Environmental Control Sections
McDonnell Douglas Corporation
P. O. Box 516, Dept. 191C
Building 102, L-3
Hazelwood, MO 63166

Dear Mr. Linzmaier:

Enclosed please find a copy of the Resource Conservation and Recovery Act Compliance Inspection Report for your facility. I believe it is self-explanatory.

By August 8, 1983 McDonnell-Douglas Corporation must submit a description of how the present storage area for facility #01248 (generator only) meets the waste confinement criteria set forth in 10 CSR 25-7.050 (2)(A)(6) cross-referenced to 10 CSR 25-7.050(3)(F). It is MDNR's position that a waste confinement system required under 10 CSR 25-7.050 (2)(A)6. that discharges to wastewater treatment units must meet one of the following criteria:

1. The area drain in the confinement area must be stopped via valve or plug until it is confirmed that no contaminants are in the discharged liquids; or

2. The wastewater treatment unit must be able to adequately treat a slug of discharged material which may be stored in the contaminant area while still meeting the NPDES or pre-treatment standards for the facility; or

3. The wastewater treatment unit must operate on a batch tank system in which case a spill in the storage area will be retained and specifically treated prior to further discharge.

Submit this description to Ms. Sandra Carroll of this office and to the St. Louis Regional Office.

If you have any questions or if we can be of assistance to you, please don't hesitate to contact Ms. Carroll or the St. Louis Regional Office.

Sincerely,

David E Bedan

David E. Bedan, Ph.D.
Director
Waste Management Program

cc: St. Louis Regional Office
Joe Jansen
David Doyle, U.S. EPA Region VII
Lyndell Harrington, U.S. EPA Region VII

MISSOURI DEPARTMENT OF NATURAL RESOURCES
P.O. Box 1368 1915 Southridge Drive Jefferson City, Missouri 65102 (314) 751-3241

Christopher S. Bond Governor
Fred A. Lafser Director

Division of Environmental Quality
Robert J. Schreiber Jr., P.E. Director

2 Sandifer
Galbraith
~~Dupont~~ Busch

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) COMPLIANCE EVALUATION INSPECTION

for

McDonnell Douglas Corporation
Brown Road and Lindberg
Hazelwood, Missouri 63145
EPA I.D. Number MOD000818963

Inspected 8:00 a.m. to 4:40 p.m.
July 6, 1983

Submitted by: PEDCo Environmental, Inc.
7331 Madison Avenue
Kansas City, Missouri 64114

Submitted for: A. T. Kearney
699 Prince Street
Alexandria, Virginia 22313

Submitted to: Jane Ratcliffe, Regional Project Officer
Stephen Busch, Task Manager
U.S. Environmental Protection Agency
Region VII
324 East Eleventh Street
Kansas City, Missouri 64106

In response to: EPA Contract 68-01-6515
Work Assignment No. R07-004
PN 3597-17-4H

July 1983

INTRODUCTION

On Wednesday, July 6, 1983, Thomas D. Robertson of PEDCo Environmental, Inc. (an EPA contractor) conducted a RCRA compliance evaluation inspection at the McDonnell Douglas Corporation located in St. Louis, Missouri. Mr. Rich Linzmaier, assistant manager of the Environmental Compliance Section, participated in the plant tour. Mr. Patterson, Mr. T. W. McMahon, and Mr. E. M. Meyers participated in the records review and exit interview. The purpose of this inspection was to clarify and verify information contained in the facility's RCRA permit application.

At 8:00 a.m. PEDCo presented credentials to the receptionist and requested to see Mr. Patterson. Mr. Patterson was unavailable, however. Mr. Linzmaier then verified PEDCo's credentials by calling Dave Doyle at EPA Region VII. After the purpose and scope of the inspection were explained, Mr. Linzmaier conducted a tour of the plant. The administrative records were then reviewed, and an exit interview was held.

The facility requires all photographs to be screened for security purposes. Mr. Linzmaier took pictures as requested by the inspector. Mr. Ron Patterson and Mr. McMahon approved all of the pictures for release. This inspection report reflects the observations of the inspector.

RCRA INSPECTION

Unless otherwise noted, the following compliance-related observations are the only areas of concern:

I. GENERATOR STANDARDS, 40 CFR 262

A. SUBPART A - GENERAL

1. The facility has generated and placed into storage approximately 44 drums of solid waste, 3 cylinders of compressed gas, and 4 cardboard boxes of miscellaneous laboratory chemicals. The facility has not determined if the waste is hazardous. Some of the drums are completely rusted through, badly dented, bulging, or leaking. Several drums did not have taps or bungs. The three cylinders are severely corroded and rusted. The cardboard boxes were full of expired reagents mostly in glass jars. Plant personnel indicated that all of these items were collected from various plant locations during house cleaning operations. 40 CFR 262.11

2. Of the 10 drums labeled hazardous waste, 7 contain xylene and 3 contain triethanelamine. These drums are stored in the yard near Tanks H-19 and H-20. Reportedly, these are mislabeled as waste. The area is not delineated on the Part A application as a hazardous waste storage area.

II. INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITIES, 40 CFR 265

A. SUBPART B - GENERAL FACILITY STANDARDS

1. A detailed chemical analysis has not been performed on those wastes discussed in Section I.A.1. Reportedly, the waste has been in storage for several months. The facility did not keep records identifying the origin of each individual drum, and the drums are not uniquely identified. The waste analysis plan utilized by the facility does not address how the contents of these drums, cylinders, and boxes will be identified. The waste analysis plan assumes some knowledge of the generation process. 40 CFR 265.13

2. The facility's inspection log does not identify the types of problems for which inspections were

made nor does it specify what particular components were inspected. The log is the same as Figure F-1 on Page F-5 of the application. The log sheet references an operations manual (Attachment D-1 of the application) that does delineate items to be inspected and it identifies some of the problems to be inspected for. Missing from the operations manual are instructions to inspect all monitoring equipment, safety and emergency equipment, and security devices. 40 CFR 265.15

Reportedly, the facility has a security force of approximately 225 persons. The duties and responsibilities of this force reportedly include inspecting fences, gates, locks, and other security devices; however, records of these activities are not kept by hazardous waste management personnel. "No smoking" warning signs were evident, but "Danger - Unauthorized Personnel Keep Out" signs or suitable alternates were not posted at each active area. 40 CFR 265.14(c)

Reportedly, the facility has approximately 30 trained firemen. The duties and responsibilities of this force reportedly include inspecting fire hydrants, portable fire extinguishers, sprinklers, and other fire-related safety equipment; however, records of these activities are not kept by hazardous waste management personnel.

The facility has installed several underground leak detection and monitoring systems, and the operations manual makes no mention of these components. This equipment must be tested and maintained. 40 CFR 265.33

B. SUBPART D - CONTINGENCY PLANS AND EMERGENCY PROCEDURES

1. None of the emergency coordinators has formal authority to commit the resources necessary to carry out the contingency plan. It would appear that the third alternate may have corporate line authority by virtue of the position (Director of Engineering). 40 CFR 265.55

C. SUBPART I - USE AND MANAGEMENT OF CONTAINERS

1. Many of the containers discussed in Sections I.A.1 and II.A.A are in poor condition. 40 CFR 265.171

2. Many of the containers discussed in Sections I.A.1 and II.A.1 are not closed. Several are missing bungs and taps and several have rusted all the way through. 40 CFR 265.173(a)

3. The cardboard boxes containing miscellaneous glass jars of expired laboratory chemicals were not adequately packed. The glass jars were strewn about inside the boxes, without the use of any packing material designed to keep the glass from breaking. No broken jars were observed, however. 40 CFR 265.173(b)

4. The containment system in Storage Area 2 had been breached. The sump was full on the day of the inspection, and there was evidence (see Photo Number 4) of the runoff reaching the sewer. The inspection log made no mention of the incident. 40 CFR 265.15(a)

D. SUBPART J - TANKS

1. Six 750-gallon open-top tanks (referred to as H-1, H-2, H-3, H-4, H-5, and H-6 in the application) have etch marks (high-liquid level indicator) approximately six inches from the top. The tanks were empty on the day of the inspection. The containment system below the tanks has been breached by what appears to have been a rupture of the drainage system piping. (See Photo Number 8.) It would also appear that the tanks have been overtapped in the past. Photo Number 7 shows scale and corrosion pitting on the base and adjacent building wall. No reference to the damaged containment system was found in the inspection log. It should be noted, however, that due to time constraints, an extensive review of the logs was not performed. 40 CFR 265.194 and 40 CFR 265.15(c). Management personnel were aware of the situation.

2. Tank Number H-20 appears to be leaking. Reportedly, this tank contains spent sodium hydroxide solution (D002) being held for recycle or reuse. Consequently, Tank H-20 is not regulated under RCRA. (See Photo Number 9.) 40 CFR 261.6(a) and 40 CFR 265.1(c)(6). Management was not aware of the leak.

3. The Building 14 sludge holding tank has approximately eight cracks that appear to penetrate the entire thickness of the walls. There was no evidence of leakage (see Photo Number 10). It is

not clear to the author, whether the cracks should be considered as a structural deterioration that must be remedied in accordance with 40 CFR 265.15(c). Reportedly the cracks have been in the tanks for several years and no leaks have been observed.

E. SUBPART Q - CHEMICAL, PHYSICAL, AND BIOLOGICAL TREATMENT

1. The facility is using an Alfa-Laval Decanter centrifuge to dewater the hazardous sludge being stored in the Building 14 Sludge Holding Tank. Centrifugation is a form of treatment, and this unit is not included in the Part A application. The conditions of operation during the interim status dated July 20, 1982, does not allow for the operation of a treatment process. 40 CFR 265.1(b). The operation of the centrifuge is contracted out to a hauling firm.

2. The inspection logs do not clearly indicate that the discharge and safety equipment are inspected each operating day. 40 CFR 265.403(a)(1)

3. The inspection logs do not clearly indicate that the construction materials or the area immediately surrounding discharge confinement structures are inspected weekly. 40 CFR 265.403(a) 3 and 4.

4. The floor of the building upon which the centrifuge is located was covered with what appeared to be dried sludge from past spills. There was also an open drum with approximately 12 inches of sludge in the operations room. The centrifuge, which was not in operation at the time of the inspection, showed no evidence of leaks.

III. PERMIT-RELATED ISSUES

1. The application does not discuss the sludge dewatering centrifuge.

2. The application does not discuss the use of cardboard boxes as containers.

3. The containment system in Storage Area Number 1 is contiguous and appears to be adequately sized. However, there are signs of spills and solvent deterioration on the asphalt base. (See Photos 2, 3, 5, and 6.)

4. The containment system in Storage Area Number 2 has been breached. The sump was full of liquid on the day of the inspection, and there was visible evidence that liquids from inside the containment structure have run off the base and entered into the sewer system (see Photo Number 4).

5. Warning signs were evident in the container storage area but not in the vicinity of the storage tanks.

6. The poly tanks were situated inside the containment structures, which appear to have adequate capacity to hold the upper 2 feet of each tank. However, 40 CFR 264.192 regulations apparently do allow the use of containment systems under tanks. The piping and valving are such that all of the tanks must be full before overtapping can occur. The valves and pumps must be manually operated. Past operating practices have not prevented overtapping of these uncovered tanks. The application indicates that these tanks are fitted with loose-fitting hinged covers; however, these were not evident at the time of the inspection. Reportedly, management has ordered the lids to be replaced.

7. The design specifications for the poly tanks were not available.

8. The training plan is attached to this report. The facility is currently upgrading the training program.

PHOTOGRAPHS

1. Container Area Number 1 - upside down drum 833 is bulging and leaking - other drums are of unknown content.

2. Container Area Number 1 - warning sign.

3. Container Area Number 1 - cardboard boxes, past spill and asphalt deterioration.

4. Container Area Number 2- breach of containment system and runoff into sewer - cardboard boxes, and gas cylinders.

5. Container Area Number 1 - cardboard boxes, past spill and asphalt deterioration.

6. Container Storage Area Number 1 - spill absorbent on floor - could not determine source of liquid.

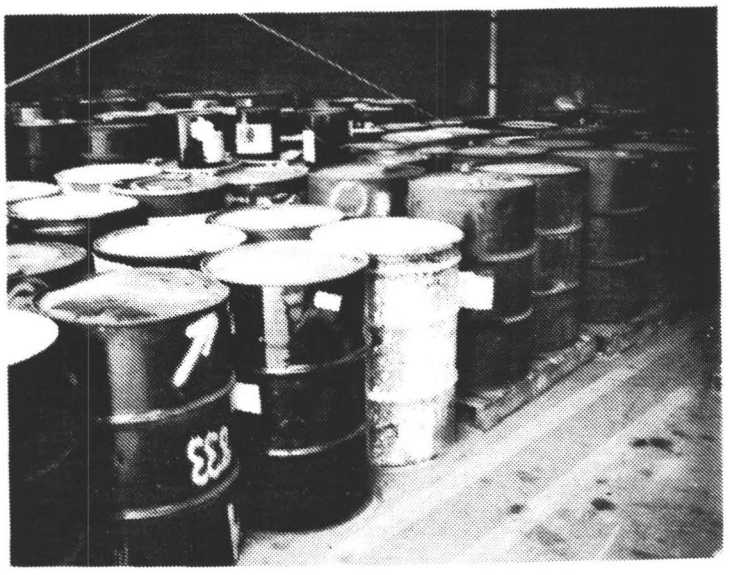
7. Six Poly Tanks - 750 gallons - evidence of past over tapping - ground scale.

8. Six Poly Tanks - 750 gallon - evidence of past drain line rupture. Asphalt completely corroded and erroded away.

9. Tank H-20 - pinhole leak

10. Sludge Tank - crack

#1



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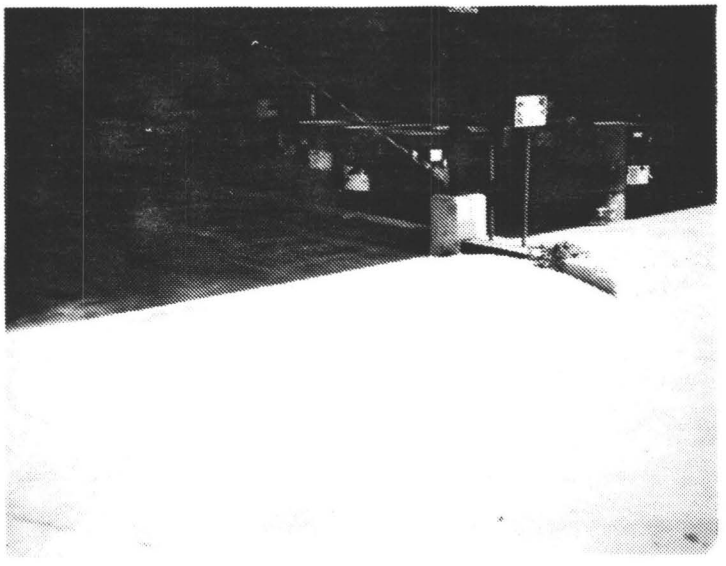

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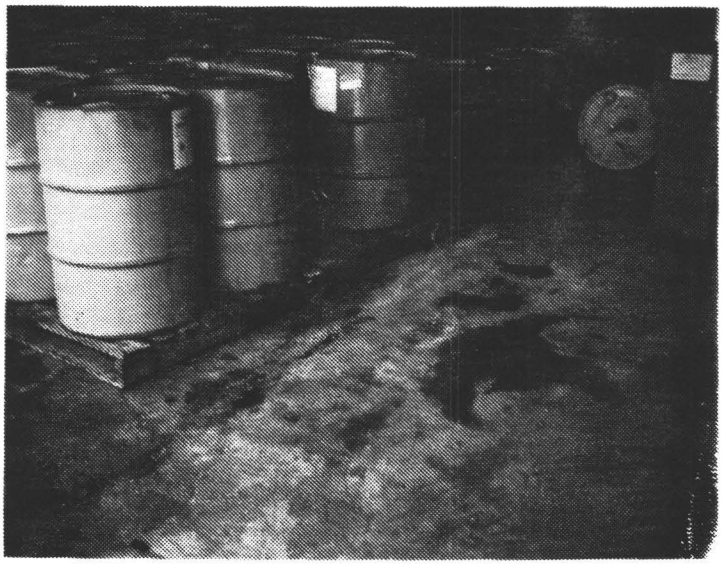

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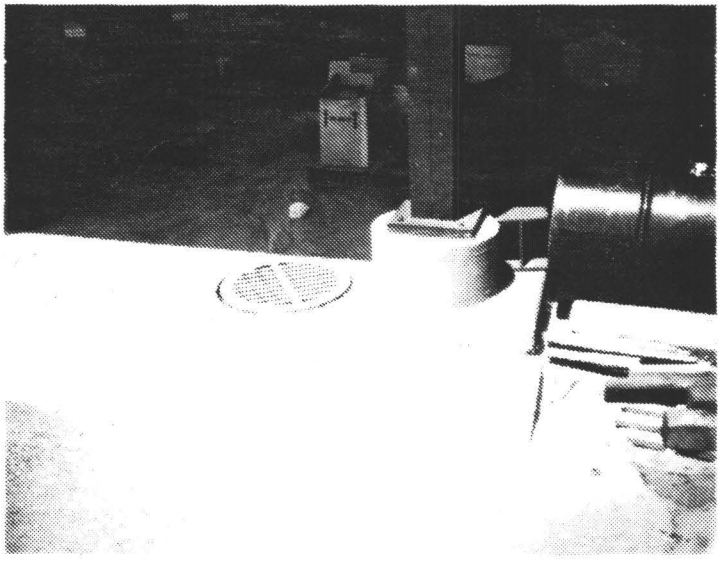

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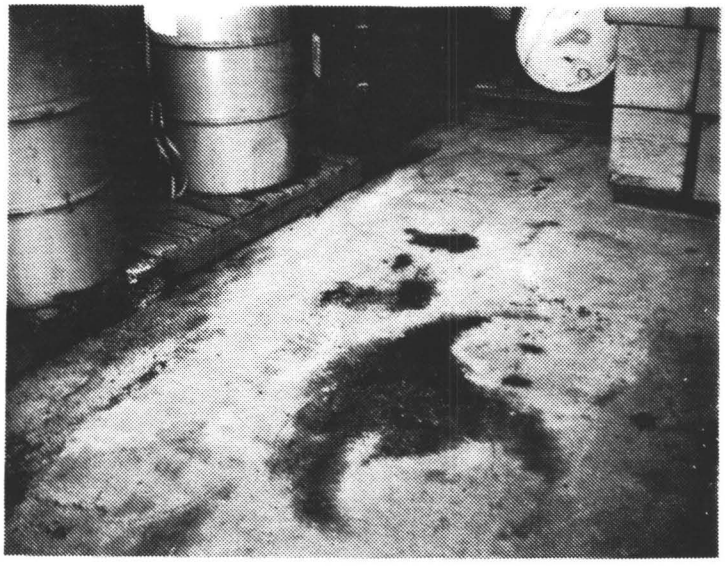

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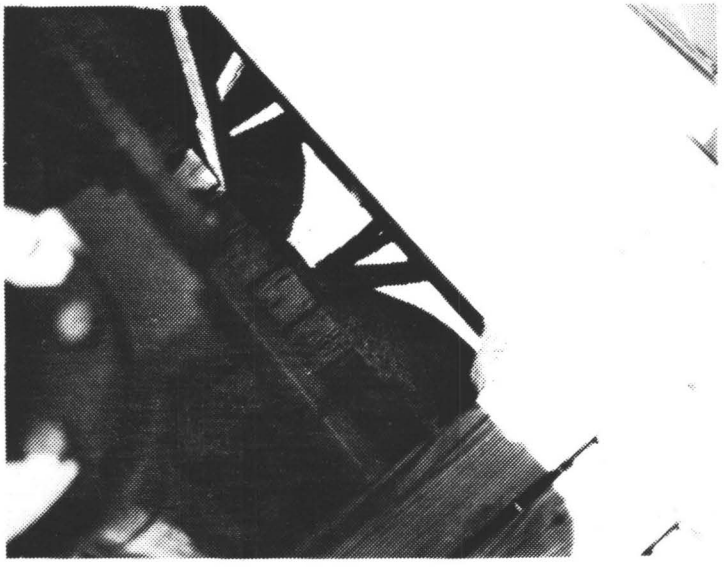

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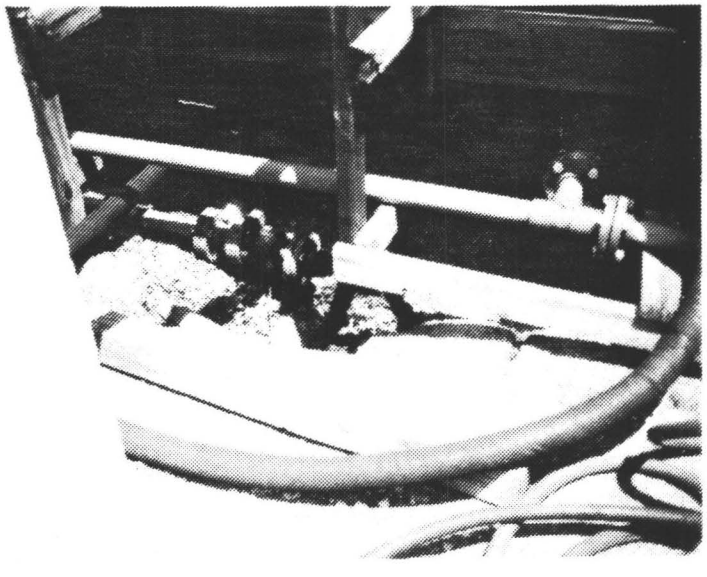

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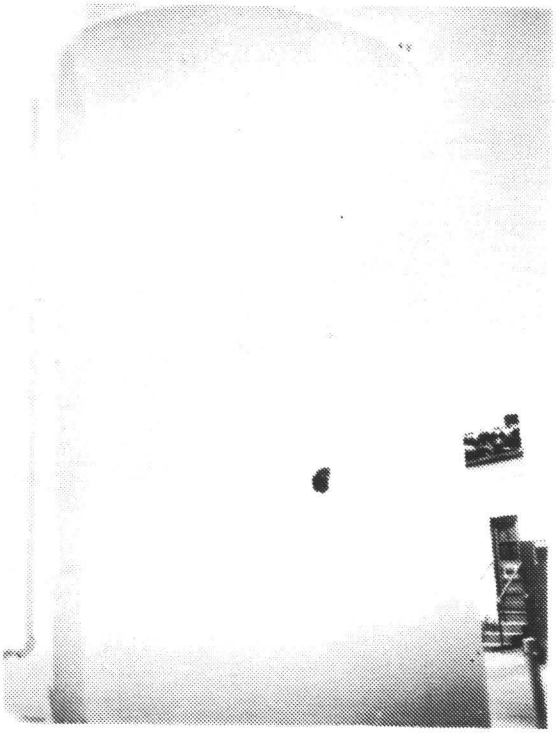

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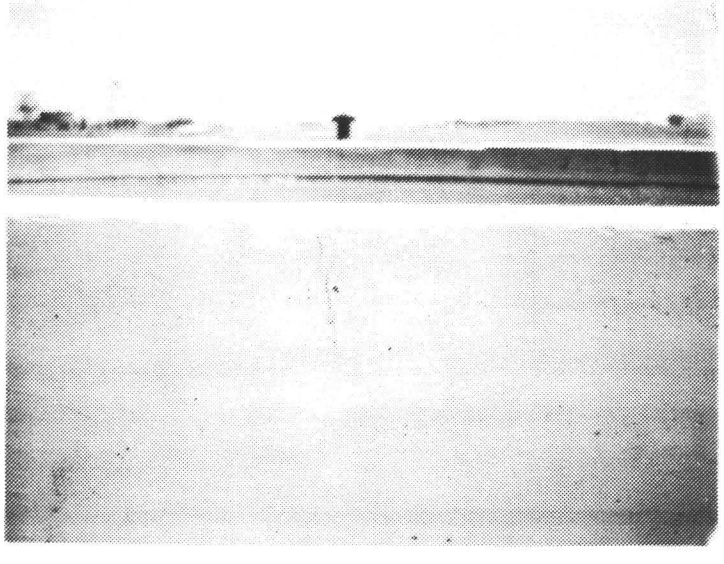


12 May 83

4510 Series

COURSE I OUTLINE — 4501

GROUP A: Assistant Foremen, Maintenance Personnel, Material Handling Personnel, Security, Fire Protection Personnel

1. Training Documentation and Record Requirements

A sign-in type training class roster will be used and maintained by the Training Dept. In addition, a post-test (brief, ten questions) will be administered to the trainees at the conclusion of the training session. These post-tests will be forwarded to Dept. 191C for filing in an Annual Hazardous Waste Training file. It is very important that records be maintained that document the required training given to, and completed by, trainees.

2. Audio/Visual Program

"A Matter of Waste"

3. RCRA Regulations/Definitions - Slides/Discussion

a. A limited overview of the requirements of the Missouri DNR Hazardous Waste Management Law and the Resource Conservation and Recovery Act (RCRA) relevant to Group A. The training requirements should be discussed briefly to ensure that the trainees understand the purpose and acquire the minimum required knowledge relevant to the positions in which they are employed.

b. Define Hazardous Waste under RCRA/Missouri DNR, i.e. Ignitable, Corrosive, Reactive, and Toxic.

4. Waste Description - Slides/Discussion/Handout #1

a. General overview of the types of Hazardous Waste generated at MCAIR.

b. More specific identification and dangerous properties of Hazardous Waste generated from specific departments/processes. Note: This will only include the large waste streams. Brief mention should also be made, however, of miscellaneous category sources at MCAIR.

5. Safety in Waste Handling - Slides/Discussion/Handout #2

   a. Basic safety concepts of the chemistry of Hazardous Waste:

      1) Ignitable - flash point;

      2) Corrosive - pH (acidity, alkalinity);

      3) Reactive - water reactive, air reactive, etc.;

      4) Toxic - basic concepts (health hazards).

      It is important that the information presented not be unnecessarily complex and inclusive.

   b. Personal Safety - selection and use of personal and protective clothing and equipment:

      1) Types of protective clothing and uses;

      2) Types of protective equipment (respirators, etc.) and uses;

      3) Standard safety precautions to be observed.

6. Storage Facilities - Slides/Discussion/Handout #3

   a. Locations

   b. Intended uses

   c. Capacities and restrictions

7. Routine Waste Handling - Slides/Discussion/Handout #4

   a. Container types

   b. Handling techniques

   c. Labels/placards

   d. Empties

   e. Leakers

   f. Notification/accumulation time

8. Hazardous Waste Responsibilities - Discussion

   a. Dept. 191C

   b. Maintenance

   c. Material Handling

   d. Safety and Medical

9. Emergency Procedures and Contingency Plans - Slides/Discussion/Handouts

   a. Security/Fire Services

   b. Response - notification, etc.

   c. Equipment - containment

   d. Systems

   e. Contingency Plan

10. Post-Test/Training Roster

Prepared by:

Bob Kaatman

R. H. Kaatman
Environmental Pollution Control
Dept. 191C

/bem

COURSE II OUTLINE 4502

Group B: Maintenance Foremen, Production Foremen (shop areas which generate hazardous waste), Hazardous Materials Office Personnel, Environmental Compliance Dept. Personnel, Occupational Safety and Medical Services (area representatives)

1. Training Documentation and Record Requirements

   A sign-in type of training class roster will be used and maintained by the Training Department. In addition, a post-test (twenty questions) will be administered to the trainees at the conclusion of the session to document successful completion of required training. These post-tests will be forwarded to Dept. 191C for filing in an Annual Hazardous Waste Training file. It is very important that records be maintained that document the required training given to, and successfully completed by, trainees.

2. Federal/State Hazardous Waste Regulations

   A. RCRA Requirements - Title 40 CFR
   B. Missouri Hazardous Waste Management Law
   C. Generator/Storage Facility - Responsibilities
   D. Training Requirements

3. McDonnell Douglas Departmental Functions

   A. Environmental Compliance - Dept. 191C
   B. Hazardous Materials Office - Dept. 790
   C. Occupational Safety and Medical Services - Dept. 064

4. Define Hazardous Waste Under RCRA/DNR

   A. Ignitable - Legal definition
   B. Corrosive - Legal definition
   C. Reactive - Legal definition
   D. EP Toxic - Legal definition
   E. Generic - Specific wastes

5. Identify Hazardous Waste Generated at MCAIR-St. Louis

   A. General overview of main waste streams
   B. Specific identification of dangerous properties of waste (i.e. health hazards and environmental pollution potential)

6. Hazardous Waste Storage Facilities

   A. Locations
   B. Intended uses
   C. Restrictions

7. Hazardous Waste Disposal

   A. Disposal sites/locations
   B. Cost of disposal
   C. Generator responsibilities/liabilities
   D. Resource conservation/recovery
   E. Industrial waste exchange

8. Manifest Tracking System

   A. Uniform Hazardous Waste Manifest
   B. Generator requirements
      (1) Information required
   C. Transporter requirements
   D. TSD Facility requirements
   E. Exception reporting

9. Slide/Tape Presentation

   Introduction to hazardous materials, substances, and wastes

10. Safety in Waste Handling

   A. Personal safety - protection of human health
      (1) Protective clothing and equipment
      (2) Supervision of personnel responsible for hazardous waste handling
   B. Environmental protection
      (1) Routine waste handling (container types, labels, etc.)
      (2) Empties
      (3) Leaking

11. Emergency Procedures and Contingency Plan

   A. Environmental Emergency - define
   B. Pollution Upset - define
   C. Emergency Response
      (1) Containment
      (2) Notification
      (3) Clean-up
   D. Alarm Systems
   E. Contingency Plan
      (1) SMP 190-70-10

12. Post-Test/Training Roster

13. Class Closing - Questions, Collect Materials

HAZARDOUS WASTE PERSONNEL TRAINING

GROUP B
POST-TEST

Date: _____

Name: _____

Employe Number: _____

Department: _____

Building (Room/Post): _____

Station: _____

Job Title/Duties: _____

Immediate Supervisor: _____

True or False (Circle Correct Answer)

1. T F A hazardous waste that does not meet the definition of an EPA waste can never be treated as a hazardous waste.

2. T F A "leaking" hazardous materials or waste container under 110 gallons may never be offered or transported.

3. T F If a "leaker" is over-packed, the outside overpack must be marked with the words "SALVAGE DRUM".

4. T F If a driver leaves a generator's dock with a "leaker", and this is known to each party, then both are liable for the violation.

5. T F If a generator determines that his waste is hazardous, then he must comply with all of the applicable EPA/DOT regulations.

6. T F "Reportable Quantities" of a hazardous substance in one container must be marked with the notation "RQ", effective 01 Jul 83.

7. T F A hazardous waste manifest, signed by all persons involved, must be returned to the generator within 35 days.

8. T F If a state assumes primacy for the RCRA regulations, then the state regulations may not exceed the Federal Standards.

9. T F Each "uniform hazardous waste manifest" requires a true signature of generator, transporter, and TSD facility.

10. T F OSHA requires labeling of hazardous materials that are known or suspected cancer-causing agents.

11. T F For specific recommendations concerning personnel safety, refer to "Personal Protective Devices Manual" or Occupational Safety and Medical Services (Dept. 064).

12. T F Personnel must be trained to properly handle hazardous waste before they shall be permitted to work with hazardous waste.

13. T F Standard Maintenance Procedure 190-70-10 is the MCAIR Contingency Plan.

14. T F Environmental Compliance (Dept. 191C) is responsible for investigating and resolving POLLUTION UPSET conditions.

15. T F In the case of an ENVIRONMENTAL EMERGENCY, the Fire Services and Security Services will be notified immediately.

16. T F It is the McDonnell Douglas philosophy to comply with <u>some</u> regulations for protection of the environment.

17. T F Contact the Hazardous Materials Office (Dept. 790) whenever a vendor truck arrives for a pickup, and ask to have the vehicle inspected.

18. T F The only area where hazardous waste may be stored longer than ninety (90) days at MCAIR is the permitted Bldg. 27 Scrap Dock Shelter.

19. T F <u>All</u> personnel handling, moving, or transferring hazardous waste shall wear personal protective clothing and equipment.

20. T F Place corrosive hazardous waste in unlined steel drums, as this saves the company money.

<u>Course Comments/Questions</u>

All Maintenance and Production Foremen should receive copies of Group A handouts, which have been distributed to their personnel.

MCDONNELL AIRCRAFT COMPANY

Box 516, Saint Louis, Missouri 63166 (314) 232-0232

HAZARDOUS WASTE TRAINING

Course I Group A

HANDOUTS

MCDONNELL DOUGLAS CORPORATION

WASTE DESCRIPTION

Hazardous wastes generated at MCAIR are those generally associated with the fabrication of aluminum, titanium, composite structures, and other materials used in the manufacture of airframes, etc.

Examples of processes involved are: (1) chemical processing tanks; (2) metal cutting, forming, and grinding; (3) degreasing operations; (4) painting operations; (5) aircraft fueling operations.

The following table identifies waste generated from MCAIR's largest waste streams. This table is not all inclusive and should be used only as a general guide. Notify Environmental Compliance (Sta. 23319) concerning pollution upset (spill/leak) conditions. Contact Occupational Safety and Medical Services (Sta. 22123) for specific information concerning personnel safety.

HAZARDOUS WASTE	HAZARD CLASS	CONTAINER TYPE	SAFETY PRECAUTIONS (SPILL OR LEAK)
Waste Acid Solutions	Corrosive EP Toxic	55-gal. plastic bung type	Keep combustibles (wood, paper, oil, etc.) away from spilled material. DO NOT TOUCH SPILLED MATERIAL. Stop leak if you can do it without risk. Use water spray to reduce vapors if necessary. Clean up with soda ash.
Waste Caustic Solutions	Corrosive EP Toxic	55-gal. steel bung type	DO NOT TOUCH SPILLED MATERIAL. Stop leak if you can do so without risk. Clean up with "Speedi-Dry".
Waste Oil, Fuel, Solvent	Flammable (may be Corrosive)	55-gal. steel bung type	No flares, smoking, or flames in spill area. DO NOT TOUCH SPILLED MATERIAL. Stop leak if you can do it without risk. Use water spray to reduce vapors. Do not get water inside containers. Clean up with "Speedi-Dry".

SAFETY IN WASTE HANDLING

Personnel working with potentially hazardous waste must do so in the safest manner possible.

RECOGNIZE POTENTIAL HAZARDS.

CONTACT YOUR SUPERVISOR OR OCCUPATIONAL SAFETY AND MEDICAL SERVICES (STA. 22123) FOR SPECIFIC INFORMATION CONCERNING PERSONNEL SAFETY.

Chemical Concepts of Hazardous Waste

1. Ignitable - The flash point is the temperature at which a substance will ignite (start burning). Waste with a low flash point (0-60°F) includes solvents, jet fuel, and some oils.

2. Corrosive - pH is the measure of acidity or alkalinity of a waste. A low pH (below 7) would indicate an acid, while a high pH (above 7) would indicate an alkaline. On the pH scale of measurement, 7 is neutral. Nitric acid has a low pH; sodium hydroxide has a high pH.

3. Reactive - Certain wastes, when exposed to water, air, or other chemicals, may produce violent behavior by evolving toxic gases or generate pressure within their containers. Included are cyanides or sulfides under acid conditions, explosives, and metal chips.

4. Toxic - Some wastes, including heavy metals, certain gases, poisons, etc., can create health hazards.

Personal Safety - Selection and Use of Protective Clothing and Equipment

ALL PERSONNEL HANDLING, MOVING, OR TRANSFERRING HAZARDOUS WASTE SHALL WEAR PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT.

Corrosive Materials - A two-piece suit or one-piece coverall of a rubberized or vinyl fabric should provide adequate protection for normal use. Other items that might be required include protection for the face (goggles, shield, hood), gloves, and foot protection (boots, overshoes, shoe covers).

Flammable Materials - Clothing for handling flammables varies from fire-resistant clothing made of Nomex to aluminized fire entry suits.

Toxic - After determining the potential for personal contamination and the type of contaminant available, selection of protective clothing can be made. Clothing could range from total incapsulating suits, coveralls, two-piece suits, to aprons. Other items include hoods, gloves, and boots. Fabrics used for this type of clothing are normally impermeable to air and impervious to liquids.

Specific recommendations are not given here due to the varying characteristics of the compounds classified as hazardous waste.

CONTACT YOUR SUPERVISOR FOR SPECIFIC RECOMMENDATIONS AND TO OBTAIN PROTECTIVE CLOTHING AND EQUIPMENT. SELECTION WILL BE BASED UPON HAZARDS THAT THE INDIVIDUAL WILL BE EXPOSED TO. SUPERVISORS ARE TO REFER TO "PERSONAL PROTECTIVE DEVICES MANUAL" OR OCCUPATIONAL SAFETY AND MEDICAL SERVICES.

Standard Safety Precautions

1. Avoid inhaling chemical fumes, mists, or vapors. If vapors are evident, proper respiratory protection shall be worn. Inspect and leak test respirator prior to use.

2. Be cautious of heat buildup while wearing protective equipment.

3. Flush the skin or eyes with water for fifteen (15) minutes to prevent burns if they should come in contact with hazardous waste. Secure first aid.

4. Stay upwind of any fire or explosion. Avoid breathing smoke.

5. Personnel must be trained to properly handle hazardous waste before they shall be permitted to work with hazardous waste.

6. Use common sense. ALWAYS BE CAREFUL.

STORAGE FACILITIES

Hazardous wastes are stored at MCAIR in 55-gallon drums, 5-gallon plastic carboys, underground, inground, and above-ground tanks, and a containerized explosive storage building.

DO NOT SMOKE NEAR ANY HAZARDOUS WASTE STORAGE FACILITY.

1. Bldg. 27 Scrap Dock Shelter - This is MCAIR's main storage facility and is permitted by State/Federal environmental protection agencies. The facility is used for storage of containers (drums/carboys) that contain a variety of hazardous waste. Environmental Compliance (Dept. 191C) provides an operator for this facility. This operator is responsible for receiving and supervising all of the containerized waste in this area. Do not deliver containers of waste to the shelter without operator approval. Both solids and liquids are stored at this facility with a storage capacity of approximately 280 55-gallon drums. Full drums are never stacked, but are positioned in categorical rows, two drums wide, with an aisle between. Call Sta. 23319, Environmental Compliance, with any questions concerning this facility.

2. Bldg. 101 Storage Shelter - This is also a container storage facility and is similar to the Bldg. 27 facility. This facility serves Tract II at MCAIR and is only used for temporary (less than 90 days) storage of waste. Do not deliver containers of waste to this shelter without prior approval of Environmental Compliance, Sta. 23319.

3. Bldg. 52, Tanks H-19 and H-20 - These two 10,000-gallon capacity, above-ground tanks provide storage for waste sodium hydroxide (caustic) solution from chemical milling of aluminum.

4. Bldg. 52, Tanks H-12, H-13, H-14, H-15, and H-16 - These five 500-gallon capacity, above-ground tanks provide storage for waste nitric and hydrofluoric acid solution from chemical milling of titanium.

5. Bldg. 52, Tanks H-1, H-2, H-3, H-4, H-5, and H-6 - These six 750-gallon capacity, above-ground storage tanks provide 4,500-gallon storage for waste nitric and hydrofluoric acid solution from chemical milling of titanium.

6. Hush House Waste Tank - This tank is located on the flight ramp underground behind Hush House #2. The 3,000-gallon capacity, below-ground tank provides storage for waste jet aircraft fuel and hydraulic system spillage. Leaks are monitored by a sensing system installed in a monitoring well adjacent to this tank.

7. Fuel Pit No. 3 Waste Tank - Located on the flight ramp, this 2,000-gallon capacity, below-ground tank provides storage for jet aircraft fuel that is spilled during fueling or defueling operations. Leaks are monitored by a sensing system installed in a monitoring well adjacent to this tank.

8. F-18 Silencer Waste Tank - A 2,000-gallon capacity, below-ground tank provides storage for spilled jet aircraft fuel and hydraulic fluid. This tank is also located on the flight ramp. Leaks are monitored by a sensing system installed in a monitoring well adjacent to this tank.

9. Bldg. 28 Waste Tank - A 5,000-gallon capacity, below-ground tank for leaked or spilled jet aircraft fuel. Leaks are monitored by a sensing system installed in a monitoring well adjacent to this tank.

10. Bldg. 6 Waste Oil Tank - A 1,000-gallon capacity, below-ground tank provides storage for oil that has been separated from the condensate of an oil-lubricated, steam-operated air compressor. Leaks are monitored by a sensing system that is installed in a monitoring well adjacent to this tank.

11. Bldg. 14 Sludge Holding Tank - A 120,000-gallon capacity, inground tank provides storage for industrial waste water treatment sludge prior to dewatering. This tank is equipped with an overflow drain which leads to the influent of our waste water pre-treatment plant.

12. Bldg. 10, Explosive Waste Storage - This building contains explosive waste generated from MCAIR activities. Dept. 790, "Hazardous Materials Office", provides an operator for this facility. This operator makes weekly inspections of the facility and ensures that material is properly handled. Call Sta. 26616 with any questions concerning this facility.

ROUTINE WASTE HANDLING

Container Types	Uses
Bung - Steel (55 gal.)	Liquid - Caustic/Oil/Fuel/Solvent
Bung - Plastic (55 gal.)	Liquid - Acid
Open-Top - Steel, Plastic Insert (55 gal.)	Solid - Acid/Caustic
Plastic Carboy (5 gal.)	Liquid - Acid/Caustic (Lab use)

Handling Techniques

Incompatible chemicals and solutions shall never be mixed in the waste containers. In case of questions, consult Environmental Compliance, Dept. 191C, Sta. 23319. Also see MMP No. 37.17.

Never pick up drums with bare forks when handling drums with a forklift; use a drum "grabber".

Pour chemicals slowly and avoid splashing. Avoid inhaling vapors.

Wear appropriate protective clothing and equipment.

Maintenance should contact shop area supervision for any special handling precautions.

The generating department must correctly label and maintain the identity of all containers as to their contents.

Handle hazardous waste only when you are sure of what it is, how to handle it safely, and how to package it properly.

If there are any questions, contact your immediate supervisor.

Labels

1. "OK to Fill", MAC Form 4605B - affixed to empty container by Environmental Compliance.
2. "Hazardous Chemical Waste", MAC Form 4596 - filled out with pencil (completely, including date waste accumulation started) by generating department and attached to drums or carboys.
3. "Flammable Liquid", MAC Form 4596B - primarily used by paint shops as substitute for "Hazardous Chemical Waste" label.
4. "Hazardous Waste", MAC Form 4605A - affixed to drum/carboy by Environmental Compliance during container inspection. Maintenance then notified to remove container of waste.
5. "Empty", MAC Form 4596A - filled out with pencil and attached to container by generating department. Container will not be labeled unless it is empty in accord with Federal/State regulations. Any questions, contact Dept. 191C, Sta. 23319.
6. "OK to Move", MAC Form 4596C - affixed to empty containers by Environmental Compliance. Maintenance then notified by Dept. 191C for container removal to a specified storage area.

Empties - A container is not officially considered empty until approved by Environmental Compliance. All residue must be removed. Drums are then relocated by Maintenance per Dept. 191C instructions.

Leakers - Leaking containers are not to be offered for transportation. Maintenance will repair, replace, or overpack leakers. To report leakers, call Environmental Compliance, Sta. 23319, on first shift. At all other times, call the MDC "Operator".

Notification to Environmental Compliance, Dept. 191C, Sta. 23319

1. To report all spills.
2. Before filling a mobile tank or MDC over-the-road tank trailer.
3. To obtain a drum or mobile tank for hazardous waste.
4. With any questions concerning proper handling of hazardous waste.

Notification to Hazardous Materials Office, Dept. 790, Sta. 26616

1. Whenever a vendor truck arrives for a pickup, and ask to have the vehicle inspected.
2. With questions concerning transportation of hazardous waste/materials.

EMERGENCY PROCEDURES AND CONTINGENCY PLAN

DEFINITIONS:

Environmental Emergency - A situation which poses a direct hazard to human life, health, property, and equipment. Fire and/or explosion are examples of an environmental emergency. Also, a spill or material release which results in the release of flammable liquids, vapors, or toxic liquids or fumes.

Pollution Upset - Accidental spills/leaks, unavoidable upsets, equipment breakdowns, or any other malfunctions that do not pose a direct threat to human life, health, property, and equipment, but do pose a threat to the environment. Oil spills/leaks or other material loss which may result in environmental pollution.

ENVIRONMENTAL EMERGENCY:

In the event of an ENVIRONMENTAL EMERGENCY, the Fire Services and Security Services will be notified immediately. The person discovering a fire or explosion will turn in an alarm at the nearest fire alarm box or telephone Fire Services at 22611. The initial response to any emergency will be to protect human health and safety, property and equipment, and then the environment.

The Security Services will be responsible for contacting local law enforcement agencies if the situation becomes serious enough to require evacuation of surrounding homes, businesses, or industries. Security will also provide advice and assistance, when requested, to Emergency Action Coordinators concerning the security aspects of building emergency plans.

In case of fire or explosion, authority to order evacuation from the immediate area of concern is delegated to the lowest level, that is, to the person discovering the fire and making the decision that it is unsafe to remain in that location. Use common sense in this regard; follow the attached "General Emergency Evacuation Instructions".

Emergency Phone Numbers

(314) 232-2611 MDC-St. Louis Fire Services
(314) 232-2821 Guard Headquarters
(314) 232-4942 First Aid and Medical (Injuries)

See SMP No. 190-70-10 for detailed emergency and pollution upset information.

POLLUTION UPSET:

In the event of a POLLUTION UPSET, Environmental Compliance (Dept. 191C) is responsible for investigating and resolving the incident and for notifying the proper pollution control agency.

To report an upset condition, telephone according to the following schedule:

1. First shift (8:00 a.m. - 4:30 p.m.) - Monday through Friday, telephone Sta. 23319 (Environmental Compliance).
2. Second and third shifts, Monday through Friday, and all shifts Saturday, Sunday, and holidays - telephone "Operator", 232-0232.

Equipment - Containment

The following is a list of oil spill containment and collection equipment that is stored at MDC-St. Louis

1. Location - Parking Lot #3 (east of Bldg. 27)
   Identification - Wooden box labeled "Emergency Oil Absorbing Boom".
2. Location - Bldg. 9
   Identification - Metal box labeled "Emergency Oil Absorbants".
3. Location - Substation 8
   Identification - Metal box labeled "Emergency PCB Spill Cleanup Equipment".
4. Location - Bldg. 14
   Identification - Trailer labeled "Oil Spill Response Trailer". This trailer requires an automobile or truck equipped with a trailer hitch to move to the spill site.

Alarm Systems

Pollution upset alarm systems are located near underground storage facilities and in some industrial and sanitary sewer systems. The alarms are activated in specific building Maintenance areas and the Bldg. 5 Boiler House. Upon receipt of an alarm, Maintenance personnel report the incident in accordance with the Pollution Upset Reporting Schedule.

Contingency Plan

Standard Maintenance Procedure 190-70-10 is the MCAIR Contingency Plan. This plan has been provided to all personnel on the standard distribution list for SMP's. Any personnel responsible for responding to or cleanup of an Environmental Emergency or Pollution Upset should become thoroughly familiar with this document. This plan will be distributed to any personnel for review, upon request to Dept. 191C, Sta. 23319. A copy of this plan (if not available elsewhere) will also be provided by Dept. 191C.

SUBJECT: GENERAL EMERGENCY EVACUATION INSTRUCTIONS

General emergency evacuation instructions to be given to all employees will include:

1. Become familiar with emergency exit locations.

2. Follow emergency instructions as may be issued by supervision and monitors.

3. Move rapidly but do not run. Proceed down stairways in an orderly manner when notified to evacuate plant premises. Do not crowd the person ahead. DO NOT use elevator in event of a fire.

4. DO NOT scream, laugh or talk or cause unnecessary noise.

5. Use the telephones only to report the emergency - Not for personal business during the emergency period.

6. If time and situations permit, take action to protect the documents you might be working on. Secure documents in your desk or a file cabinet. Turn off machines and equipment per instructions.

7. DO NOT remain in restrooms or locker rooms.

8. DO NOT return for clothing or personal items.

9. DO NOT attempt to return into the building or area if instructed to evacuate until the all clear instructions have been given.

10. DO NOT attempt to exit building through the MARDIX Control stations. Exit through emergency exit doors.

U.S. ENVIRONMENTAL PROTECTION AGENCY

RCRA INSPECTION
CONFIDENTIALITY NOTICE

Name and Address of Inspector(s)	Name and Address of Facility
PEDCo ENVIRONMENTAL, INC. CROWN CENTER, SUITE 300 2420 PERSHING ROAD KANSAS CITY, MISSOURI 64108 (816) 474-1376 TELEX (816) 474-7302	MCDONNELL DOUGLAS CORP ST. LOUIS, MO P.O. BOX 516 63166
	Owner, (Operator), or Agent in Charge JEROME C PATTERSON
	Title SECTION MANAGER ENVIRONMENTAL COMPLIANCE
	Address P.O. BOX 516 ST. LOUIS, MO 63166
Name of Individual to Whom Notice Given J. C PATTERSON	Title / Date SECTION MANAGER 6JUL83

It is possible that EPA will receive public requests for release of the information obtained during inspection of the facility above. Such requests will be handled by EPA in accordance with provisions of the Freedom of Information Act (FOIA), 5 U.S.C. 552; EPA regulations issued thereunder, 40 CFR Part 2; and the Resource Conservation and Recovery Act, Section 3007, EPA is required to make inspection data available in response to FOIA requests, unless the Administrator of the Agency determines that the data contains information entitled to confidential treatment.

Any or all of the information collected by EPA during the inspection may be claimed confidential, if it relates to trade secrets or commercial or financial matters that you consider to be confidential. If you make claims of confidentiality, EPA will disclose the information only to the extent, and by the means of the procedures set forth in the regulations (cited above) governing EPA's treatment of confidential information. Among other things, the regulations require that the EPA notify you in advance of publicly disclosing any information you have claimed and certified confidential.

To claim information confidential, you must certify that each claimed item meets all of the following criteria:

1. Your company has taken measures to protect the confidentiality of the information, and it intends to continue to take such measures.

2. The information is not, and has not been, reasonably obtainable without your company's consent by other persons (other than governmental bodies) by use of legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding).

3. The information is not publicly available elsewhere.

4. Disclosure of the information would cause substantial harm to your company's competitive position.

At the completion of the inspection, you will be given a receipt for all documents, samples, and other materials collected. At that time, you may make claims that some or all of the information is confidential and meets the four criteria listed above.

If you are not authorized by your company to make confidentiality claims, this notice will be sent by certified mail, along with the receipt for documents, samples, and other materials, to the Owner, Operator, or Agent in Charge of your firm, within two days of this date. That person must return a statement, specifying any information which should receive confidential treatment.

The statement from the Owner, Operator, or Agent in Charge should be addressed to:

Mr. John H. Morse
Regional Counsel
United States Environmental Protection Agency
324 East 11th Street
Kansas City, Missouri 64106

and mailed by registered, return-receipt requested mail within seven (7) calendar days of receipt of this Notice.

Failure by your firm to submit a written request that information be treated as confidential, either at the completion of the inspection or by the Owner, Operator, or Agent in charge, within the seven-day period, will be treated by the EPA as a waiver by your company of any claim for confidentiality regarding the inspection data.

To be completed by the facility official receiving this Notice:

I have received and read this Notice.

Name Jerome C Patterson

Title SECTION MANAGER

Signature JEROME C PATTERSON

Date 6 JUL 83

If there is no one on the premises of the facility who is authorized to make business confidentiality claims for the firm, a copy of this Notice and other inspection materials will be sent to the Owner, Operator, or Agent in charge of the company. If there is another company official who should also receive this information, please designate below:

Name _____

Title _____

Address _____

_____

~~Jane~~ C. Patterson Plant engineering
Dept 191C - Building 107
232-3319 102

MOD 000818963
EPA IDENTIFICATION NUMBER

RCRA INSPECTION REPORT - INTERIM STATUS STANDARDS

I. General Information:

(A) Facility Name: McDonnell Douglas Corporation

(B) Street: P.O. Box 516 Brown Road @ Lindbergh

(C) City: Hazelwood (D) State: MO (E) Zip Code: 63145

(F) Phone: 314-232-3319 (G) County: St. Louis

(H) Operator: McDonnel aircraft co

(I) Street: McDonnel Douglas @ Lindbergh

(J) City: St. Louis ~~Rd~~ (K) State: Mo (L) Zip Code: 63145

(M) Phone: _____ (N) County: _____

(O) Owner: SAME

(P) Street: _____

(Q) City: _____ (R) State: _____ (S) Zip Code: ____

(T) Phone: _____ (U) County: _____

(V) Type of Ownership: ____ Federal ____ Municipal X Private ____ State ____ County

(W) Date of Inspection: 7-6-83 (Q) Time of Inspection (From) 9:00A (To) 4:45

(X) Weather Conditions: Hot Sunny

(Z) Inspection Participants	Title	Telephone
Tom Robertson	Pedco Environmental	816-333-8484
Rich Linzmaier	Ass. Manager environmental Complia	
Ron Patterson	" " "	

II. Description of Site Activity

(A) X Generator (Form 2)

(B) ____ Transporter (Form 3)

(C) ____ Chemical, Physical and Biological Treatment (Form 4)

(D) X Storage (Form 5)

(E) ____ Landfill (Form 6)

(F) ____ Incineration (Form 7)

(G) ____ Land Treatment (Form 4)

(H) ____ Thermal Treatment (Form 7)

(I) Comments: The facility has not included a centrifuge in the Part B Application

Supplemental forms (Listed in Parathesis) must be completed for each activity inspected. Attach all Supplemental forms to this report.

	Yes	No	Not Inspected	See Remark Number
(J) Has this facility Submitted a Part A Permit Application?	✓			

RCRA COMPLIANCE INSPECTION REPORT
GENERATORS CHECKLIST

Section A - EPA Identification No.

1. Does Generator have EPA I.D. No.? X Yes ___ No

   a. If yes, EPA I.D. No. M O D 0 0 0 8 1 8 9 6 3

262.21 **Section B - Manifest**

1. Does generator ship waste off-site? X Yes ___ No

   a. If no, do not fill out Sections B and D.

   b. If yes, identify primary off-site facility(s) Use narrative explanations sheet.)

2. Does generator use Manifest? X Yes ___ No

   a. If no, is generator a small quantity generator? ___ Yes X No

   261.5 1. If yes, does generator indicate this when sending waste to a T/S/D facility ___ Yes ___ No NA

   b. If yes, does manifest include the following information?

   1. Manifest Document No. X Yes ___ No

   2. Generators Name, Mailing Address, Telephone No. X Yes ___ No

   3. Generator EPA I.D. No. X Yes ___ No

   4. Transporter(s) Name and EPA I.D. No. X Yes ___ No

   5. a. Facility Name, Address and & EPA I.D. No. X Yes ___ No

   → b. Alternate Facility Name, Address and EPA ID NO. X Yes ___ No

   → c. Instructions to return to generator if undeliverable? X Yes ___ No

   hard written on preprinted forms

   6. Waste information required by DOT - Shipping name, quantity, (weight, or vol.) containers (type and number.) X Yes ___ No

   7. Emergency Information (optional) (special handling instructions, phone no.) X Yes ___ No

(8) Is the following certification on each manifest form? X Yes ___ No

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

(9) Does Generator retain copies of Manifests? X Yes ___ No

If yes, complete a through e.

Hazardous Materials shipping office

a. (1) Did generator sign and date all manifests? ✓ X Yes ___ No
(2) Who signed for generator? Name VARIES Title ___

b. (1) Did generator obtain handwritten signature and date of acceptance from initial transporter? X Yes ___ No
(2) Who signed and dated for transporter? Name VARIES Title ___

c. Does generator retain one copy of manifest signed by generator and transporter? X Yes ___ No

d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? X Yes ___ No

e. Does generator retain copies for 3 years? X Yes ___ No

Section C - Hazardous Waste Determination

262.12 1. Does generator generate solid waste(s) listed in Subpart D (List of Hazardous Waste)? ✓ Yes ___ No

a. If yes, list wastes and quantities (include EPA Hazardous Waste No.) See Part B

2. Does generator generate solid waste(s) that exhibit hazardous characteristics? (corrosovity, ignitability, reactivity, EP toxicity) ✓ Yes ___ No

a. If yes, list wastes and quantities (include EPA Hazardous Waste No.) See Part B

b. Does generator determine characteristics by testing or by applying knowledge of processes? BOTH

1. If determined by testing, did generator use test methods in Part 261, Subpart C (or Equivalent)? ✓ Yes ___ No

a. If equivalent test methods used, attach copy of equivalent methods used.

3. Are there any other solid wastes generated by generators? ✓ Yes ___ No

   a. If yes, did generator test all wastes to determine non-hazardous characteristics? ___ Yes ✓ No

      1. If no, list wastes and quantities deemed non-hazardous or processes from which non-hazardous waste was produced? (Use additional sheet if necessary.)

Approx 44 Drums, some in very poor condition, have not been analyzed to determine the drums content see PHOTO #1 These drums are stored in the south end of area #1. 3 Small pressurized tank cylinders are badly corroded and isolated in the CN storage area

Section D - Pre-Transport Requirements

1. Does Generator package waste in accordance with 49 CFR 173 178, and 179? (DOT requirements) ✓ Yes ___ No

265.174 2. a. Are containers to be shipped leaking or corroding? ✓ Yes ___ No
   b. Use sheet to describe containers and condition.
   c. Is there evidence of heat generation from incompatible wastes in the containers? ✓ Yes ___ No

262.32 3. Does the generator use DOT labeling requirements in accordance with 49 CFR 172? ✓ Yes ___ No

4. Does the generator mark each package in accordance with 49 CFR 172? ✓ Yes ___ No

5. Is each container of 110 gallons or less marked with the following label? ✓ Yes ___ No

   Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest policy or public safety authority or the U.S. Environmental Protection Agency.

   Generator's Name and Address _____

   _____

   Manifest Document Number _____ _____

262.33 6. Does generator have placards to offer to transporters? ✓ Yes ___ No

262.34 7. Accumulation Time

   a. Are containers used to temporarily store waste before transport? ✓ Yes ___ No

1. If yes, is each container clearly dated? Also, fill out rest of No. 7 (Accum. Time) ✓Yes ___No

b. 1. Does generator inspect containers for leakage or corrosion? (265.174 - inspections) ✓Yes ___No
2. If yes, with what frequency? weekly

c. Does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line? (265.176 - Special Requirements for Ignitable or Reactive wastes) ✓Yes ___No

NOTE: If tanks used, fill out checklist for tanks.

d. Are the containers labeled and marked in accordance with Section D 3, 4, & 5 of this form? ✓Yes ___No

NOTE: If generator accumulates waste on-site, fill out checklist for General Facilities, Section B - Preparedness and Prevention, Section C - Contingency Plan and Emergency Procedures

e. Does generator comply with requirements for personnel training? (Attach checklist for 265.16 - Personnel Training) ✓Yes ___No

8. Describe storage area. Use photos and narrative explanation sheet.

262.40 Section E - Recordkeeping and Records

1. Does gnerator keep the following reports for 3 years?

a. Manifests and signed copies from designated facilities? ✓Yes ___No
b. Annual reports ✓Yes ___No
c. Exception Reports None ✓Yes ___No
d. Test results ✓Yes ___No

2. Where are records kept (at facility or elsewhere)? at facility
3. Who is in charge of keeping the records? Name Rich Ingemunson Title ___

Section F - Special Conditions

262.50 1. Has generator received from or transported to a foreign source any hazardous waste? ___Yes ✓No

a. If yes, has he filed a notice with the Regional Administrator? ___Yes ___No N/A
b. Is this waste manifested and signed by Foreign consignee? ___Yes ___No N/A
c. If generator transported wastes out of the country, has he received confirmation of delivered shipment? ___Yes ___No N/A

RCRA COMPLIANCE INSPECTION REPORT
FACILITIES CHECKLIST

Section A - General Facility Standards

262.12 1. Does facility have EPA Identification No.? X Yes ___ No

A. If yes, EPA I.D. No. MOD000818963
If no, explain _____

262.50 2. Has facility received hazardous waste from a foreign source? ___ Yes X No

A. If yes, has he filed a notice with the Reg. Admin. ___ Yes ___ No NA

265.13 Waste Analysis

3. Does facility maintain a copy of the waste analysis plan at the facility? X Yes ___ No

A. If yes, does it include

(1) Parameters for which each waste will be analyzed? ___ Yes X No
44 drums of ~~PCB~~ UNKNOWNS in da

(2) Test methods used to test for these parameters? ___ Yes X No

(3) Sampling method used to obtain sample? grab ✓ Yes ___ No

(4) Frequency with which the initial analysis will be reviewed or repeated? ✓ Yes ___ No

(5) (for off-site facilities) Waste analyses that generators have agreed to supply? ✓ Yes ___ No NA

(6) (for off-site facilities) Procedures which are used to inspect and analyze each movement of hazardous waste including:

a. Procedures to be used to determine the identity of each movement of waste? ___ Yes ___ No NA

Brian Ruby

b. Sampling method to be used to obtain representative sample of the waste to be identified? NA ___ Yes ___ No

265.14 4. Does the facility provide adequate security through

A. 24-hour surveillance system? (e.g. television monitoring or guards) X Yes ___ No

OR

B. (1) Artificial or natural barrier around facility (e.g. fence or fence and cliff)? X Yes ___ No
Describe fences surround facility however, there is no
AND
barrier separating McDonnell Douglas and the runways @ Long Beach Airport.

(2) Means to control entry through entrances (e.g. attendant, television monitors, locked entrance, controlled roadway access)? X Yes ___ No
Describe Guards, T.V.'s and locks

General Inspection Requirements

265.15 (b) 5. Does the owner/operator maintain a written schedule at the facility for inspecting:

a. Monitoring equipment? Pollutent leak detection system ___ Yes ✓ No

b. Safety and emergency equipment? ___ Yes ✓ No

c. Security devices? X Yes ___ No

d. Operating and structural equipment? ___ Yes ✓ No

e. Types of problems of equipment?

1. malfunction ___ Yes ✓ No

2. operator error ___ Yes ✓ No

3. discharges ___ Yes ✓ No

265.15 (d) 6. Does the owner/operator maintain an inspection log? X Yes ___ No

A. If yes, does it include:

(1) Date and time of inspection? ✓ Yes ___ No

(2) Name of inspector? ✓ Yes ___ No

(3) Notation of observations? ✓ Yes ___ No

(4) Date and nature of repairs or remedial action? ___ Yes ✓ No

Tanks & containment system breached Leaking Tank

B. Are there any malfunctions or other deficiencies not corrected? (Use narrative explanation sheet). ✓ Yes ___ No

265.16 Personnel Training

7. Does the owner/operator maintain Personnel Training Records at the facility? computerized and hard copies X Yes ___ No
How long are they kept? _____

New Regs

A. If yes, do they include:

(1) Job title and written job description of each position? X Yes ___ No

(2) Description of type and amount of training? X Yes ___ No

(3) Records of training given to facility personnel? ___ Yes X No
Not required

265.17 Requirements for Ignitable, Reactive or Incompatible Waste

(a) 8. Does facility handle ignitable or reactive wastes? X Yes ___ No

A. If yes, is waste separated and confined from sources of ignition or reaction, (open flames, smoking, cutting and welding, hot surfaces, frictional heat) sparks (static, electrical or mechanical), spontaneous ignition (e.g. from heat producing chemical reactions) and radiant heat? X Yes ___ No

1. If yes, use narrative explanations sheet to describe separation and confinement procedures.
2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

B. Are smoking and open flame confined to specifically designated locations? X Yes ___ No

C. Are "No Smoking" signs posted in hazardous areas? X Yes ___ No

(b) 9. Check containers

A. Are containers leaking or corroding? (see notes) X Yes ___ No

B. Is there evidence of heat generation from incompatible wastes? ___ Yes X No
(Use narrative explanations sheet to describe condition of containers.)

265.31 Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion or contamination of the environment? ___ Yes X No

If yes, use narrative explanations sheet to explain.

265.32 2. Is the facility equipped with

A. Internal communication or alarm system? ✓ Yes ___ No

(1) Is it easily accessible in case of emergency? ✓ Yes ___ No

B. Telephone or two-way radio to call emergency response personnel? ✓ Yes ___ No

C. Portable fire extinguishers, fire control equipment spill control equipment and decontamination equipment? ✓ Yes ___ No

265.33 (1) Is this equipment tested to assure its proper operation? ✓ Yes ___ No

D. Water of adequate volume for hoses, sprinklers or water spray system? ✓ Yes ___ No

(1) Describe source of water St. Louis County Water Co.

265.35 3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? ✓ Yes ___ No

265.37 4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) ✓ Yes ___ No

265.50 5. In the case that more than one police and fire department might respond, is there a designated primary authority? ___ Yes ___ No
a. If yes, list primary authority McDonnel Douglas

265.52 (a) 6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors and equipment suppliers? ✓ Yes ___ No
Are they readily available to all personnel? ✓ Yes ___ No

(c) 7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? ✓ Yes ___ No

8. If State or local authorities decline to enter, is this entered in the operating record? ✓ Yes ___ No

265.52 Section C - Contingency Plan and Emergency Procedures

1. Is a contingency plan maintained at the facility? ✓ Yes ___ No

a. If yes, is it a revised SPCC Plan? ✓ Yes ___ No

2. Is there an emergency coordinator on site at all times? (no) ✓ Yes ___ No
on call yes

Section D - Manifest System, Recordkeeping and Reporting

265.71 1. Does facility receive waste from off-site? ✓ Yes ___ No

a. If yes, does the owner/operator retain copies of all manifests? ✓ Yes ___ No

(1) Are the manifests signed and dated and returned to the generator? ✓ Yes ___ No

(2) Is a signed copy given to the transporter? ✓ Yes ___ No

2. Does the facility receive any waste from a rail or water (bulk shipment) transporter? ✓ Yes ___ No

a. If yes, is it accompanied by a shipping paper? ___ Yes ___ No NA

(1) Does the owner/operator sign and date the shipping paper and return a copy to the generator? ___ Yes ___ No NA

(2) Is a signed copy given to the transporter? ___ Yes ___ No NA

3. Has the owner/operator received any shipments of waste which were inconsistent with the manifest? (manifest discrepancies) 265.72 ___ Yes X No

a. If yes, has he attempted to reconcile the discrepancy with the generator and transporter? ___ Yes ___ No NA
1. If no, has Regional Administrator been notified? ___ Yes ___ No

4. Does the owner/operator keep a written operating record at the facility? 265.73 ✓ Yes ___ No

A. If yes, does it include:

(1) Description and quantity of each hazardous waste received? 44 Drums ___ Yes ✓ No

(2) Location and quantity of each hazardous waste at each location? ___ Yes ✓ No

(3) Records and results of waste analyses? ✓ Yes ___ No

(4) Reports of incidents involving implementing of the contingency plan? ✓ Yes ___ No

(5) Records and results of required inspections? ✓ Yes ___ No

(6) Monitoring, testing or analytical data? ✓ Yes ___ No

(7) Closure cost estimates and for disposal facilities post-closure cost estimates? (Not effective until May 19, 1981.) ✓ Yes ___ No

265.73 b. Has the facility received any waste (that does not come under the small generater exclusion) not accompanied by a manifest? ___ Yes ✓ No

a. If yes, has he submitted an unmanifested waste report to the Regional Administrator? ___ Yes ___ No NA

DATE _____

EPA ID NO. _____

RCRA COMPLIANCE INSPECTION REPORT
NARRATIVE EXPLANATIONS

SECTION I.A.-9 PART _____

44 Drums are in POOR condition, ie TOPS rusted completely through, dents and bulges are prevalent. Some are labeled hazardous waste some are not labeled at all See Photo #1

SECTION _____ PART _____

SECTION _____ PART _____

FACILITY _____

DATE _____

EPA ID NO. _____

RCRA COMPLIANCE INSPECTION REPORT
NARRATIVE EXPLANATIONS

SECTION _____ PART _____

SECTION _____ PART _____

SECTION _____ PART _____

SITE PLAN

(Subpart I Section 265.170 - "General Operating Requirements"

R.O. USE

Inspection file No:

Name of Facility: McDonnel Douglas Corp

Address: Brown & Lindberg Rds
Hazelwood MO

Reviewer:

EPA Generator ID Number: MOD 000818963

Facility Inspection Representative: Rich Langmaier

Title: Assistan section manager - environmental compliance

Date Reviewed:

Telephone Number: 314-232-3319

Form "I"

The questions contained in this checklist apply to owners and operators of all hazardous waste facilities that store containers of hazardous waste, except as Section 265.1 provides otherwise.

ert. Regs. 40 C.F.R. Part:			
65.171	1. Are all containers in good condition, i.e., not showing signs of leakage or corrosion or any other deterioration/deformation?	Yes	(No)
5.171	2. Are containers lined or made of materials compatible with hazardous wastes placed into them so that the container will not react or corrode with the hazardous wastes?	Undetermined Yes	No
.173(a)	3. Are all containers holding hazardous waste kept closed during storage?	Yes	(No)
5.174	4. Are areas where hazardous waste containers are stored inspected by the owner/operator at least once a week?	(Yes)	No
5.15(d) 5.15(b)	5. Is an inspection log maintained? (See question #5 of TSD checklist.)	(Yes)	No
5.176	6. Are containers holding ignitable or reactive waste located at least 50 ft. from the facility's property line?	(Yes)	No
5.177(a)	7. Are incompatible wastes placed in the same container? (See Appendix 5 for examples.)	Yes	(No)
5.177(c)	8. Are storage containers holding hazardous wastes which are incompatible with nearby materials stored in containers, tanks, piles, or surface impoundments separated by dikes, berms, walls, or other devices?	(Yes)	No

1. Are there any tanks which are not being used which the facility no longer plans to use? ___yes X no

   a. If yes, has all hazardous waste and hazardous waste residue been removed from these tanks, discharge control equipment, and discharge confinement structures? ___yes ___no NA

265.192 2. Are tanks presently used to treat or store waste? X yes ___no

   a. If no, do not complete rest of form.
   b. If yes, check tanks.

   Is there evidence that incompatible wastes have been placed in the tank? Is there evidence of any ruptures, leaks or corrosion? (Use narrative explanations sheet) X yes ___no
   See NOTES Page 3

3. Are there any uncovered tanks? X yes ___no

   a. If no, do not complete B-E
   b. If yes, do they have 2 feet (60cm) freeboard? ___yes X no

   or

   c. A containment structure? (e.g. dike or trench) ___yes X no

   or

   d. A drainage control system? X yes ___no

   or

   e. A diversion structure? (e.g. standby tank) ___yes X no
   (NOTE: The structure in c,d or e must have a capacity that equals or exceeds the volume of the top 2 feet (60cm) of the tank.

4. Are any of the tanks continuous feed? X yes ___no

   a. If yes, is it equipped with a means to stop inflow (e.g. waste feed cutoff or by-pass to a stand-by tank)? ___yes X no

265.193 Waste Analysis

5. Is the tank used to store one waste exclusively? X yes ___ no

   a. If no, what are the different wastes stored in the tank? (Use narrative explanations sheet)

   b. Are waste analyses and trial treatment or storage tests done on these different wastes? ___ yes ___ no NA

      (1) If no, does he have written, documented information on similar storage or treatment of similar wastes? ___ yes ___ no NA

   c. Are there records available of these waste analyses in the operating record? X yes ___ no

265.194 Inspections:

6. Does the owner/operator inspect the following at least daily? X yes ___ no

   a. Discharge control equipment (e.g. waste feed cut-off, by pass and/or drainage systems)? X yes ___ no

   b. Monitoring equipment (e.g. pressure and temperature gages)? X yes ___ no

   c. Level of waste in each uncovered tank? X yes ___ no

7. Does the owner/operator inspect the following at least weekly? X yes ___ no

   a. Construction materials of tanks for corrosion or leaks? X yes ___ no
   b. Construction materials of and area surrounding discharge confinement structures for erosion or signs of leakage? X yes ___ no

8. Is a written schedule of these inspections kept at the facility? X yes ___ no

9. Does the facility maintain a record of the closure plan on site? X yes ___ no

10. Are ignitable or reactive wastes placed in tanks? X yes ___ no

    a. If yes, are they treated, rendered or mixed before or immediately after placement in the tank so it no longer meets the definition of ignitable or reactive? ___ yes X no

       Or

    b. Is the waste protected from sources of ignition or reaction? X yes ___ no

3. (continued)

(1) If yes, use narrative explanations sheet to describe separation and confinement procedures *see Part B application*

(2) If no, use narrative explanations sheet to describe sources of ignition or reaction

or

c. Is the tank used solely for emergencies? ___yes X no

11. Are incompatible wastes placed in the same tank? ___yes X no

12. If a waste is to be placed in a tank that previously held an incompatible waste, was that tank washed? *NA* ___yes ___no

a. If yes, describe washing procedures (Use narrative explanations sheet)

Describe how it is possible for incompatible waste to be placed in the same tank. (Use narrative explanations sheet)

NOTES,

Subpart K

SURFACE IMPOUNDMENTS CHECKLIST

1. Are there any surface impoundments which are not being used which the facility does not plan to use in the future? ___yes__no

   a. If yes, has all hazardous waste and hazardous waste residue been removed from the impoundment? ___yes__no

2. Are impoundments presently used to treat or store waste? ___yes__no

   a. If no, do not complete rest of form.
   b. If yes, check impoundments.

265.222 3. Does the impoundment appear to maintain at least 2 feet (60 cm) of freeboard? ___yes__no

4. Is there evidence of overtopping of the dike? ___yes__no

265.223 5. Does the impoundment have a containment system? ___yes__no

   a. Does the earthen dike have a protective cover (e.g. grass, shale, rock) to minimize wind and water erosion? (Use narrative explanations sheet) ___yes__no

6. What wastes are treated in the impoundment? (Use narrative explanations sheet)

265.225 7. Are waste analyses and trial tests conducted on these wastes? ___yes__no

   a. If not, does the owner/operator have written documented information on similar treatment of similar wastes? ___yes__no

8. Is this information retained in the operating record? ___yes__no

9. Is the impoundment inspected daily to check freeboard level? ___yes__no

10. Is the impoundment, dikes and vegetation surrounding the dike inspected weekly to detect leaks, deterioration or failures? ___yes__no

11. Does the facility maintain a record of the closure plan on site? (Effective May 19, 1981) ___yes___no

12. Are ignitable or reactive wastes placed in the impoundment? ___yes___no

    a. If no, do not complete b and c.
    b. If yes, are they treated, rendered or mixed before or immediately after placement in the impoundment so it no longer meets the definition of ignitable or reactive? ___yes___no

    or

    c. Is the impoundment used solely for emergencies? ___yes___no

13. Are incompatible wastes placed in the impoundment? ___yes___no

WASTE PILES CHECKLIST

NOTE: Waste piles may also be managed as a landfill.

265.251 1. Is the pile containing hazardous waste protected from wind? ___yes___no

265.252 2. Is a representative sample of waste from each incoming shipment analyzed before the waste is added to the pile to determine the compatibility of the wastes? ___yes___no

3. Does the analysis include a visual comparison of color and texture? ___yes___no

265.253 4. Is the leachate or run-off from the pile considered a hazardous waste? (Effective November 19, 1981) ___yes___no

a. If yes, is the pile managed with the following?

(1) An impermeable base compatible with the waste? ___yes___no
(2) Run on diversion? ___yes___no
(3) Leachate and run-off collection? ___yes___no

or

b. 1. Is the pile protected from precipitation and run-on by some other means? ___yes___no

265.256 5. Are ignitable or reactive wastes placed in the pile? ___yes___no

a. If yes, does the addition of the waste result in the waste or mixture no longer meeting the definition? ___yes___no
(Use narrative explanation sheet to describe procedure)

or

b. Is the waste protected from sources of ignition or reaction? ___yes___no

(1) If yes, use narrative explanations sheet to describe separation and confinement procedures.

(2) If no, use narrative explanations sheet to describe sources of ignition or reaction.

6. Is the pile separated from other sources of reaction by a dike, berm or wall? ___yes___no

7. Is there evidence of fire, explosion, gaseous emissions, leaching or other discharge? (Use narrative explanation sheet) ___yes___no

Subpart M

LAND TREATMENT CHECKLIST

265.272 1. Is run-on diverted away from the land treatment facility (Effective May 19, 1981) ____yes__no

2. Is run-off from the land treatment facility collected? (Effective May 19, 1981) ____yes__no

3. Is the runoff analyzed to see if it is a hazardous waste? ____yes__no

a. If the run-off is considered hazardous, how is it handled? (Use narrative explanations sheet)

b. If it is not a hazardous waste, is it discharged through a point source to surface waters? ____yes__no

(1) If yes, list NPDES Permit No._____

4. What hazardous wastes are treated at the land treatment facility?

Subpart D Listed Wastes

Characteristic Wastes (EP Toxicity)

265.273 A. For those listed wastes, were analyses done to determine the concentrations of those constituents which caused the waste to be listed?

(1) If yes, what are these concentrations? (Use narrative explanation sheet)

B. For those characteristic Wastes (EP) Toxicity, what are the concentrations of the following

Concentration (Mg/l)	Waste
	Arsenic
	Barium
	Cadmium
	Chromium
	Lead
	Mercury
	Selenium
	Silver
	Endrin
	Lindane
	Methoxychlor
	Toxaphene
	2,4 D
	2,4,5-TP Silvex

2.

265.276 5. Are food chain crops grown? ___yes___no

a. If yes, what are the concentrations of the following in the soil and vegetation.

	Soil Concentration (mg/l)	Vegetation Concentration (mg/l)
Arsenic		
Cadmium		
Lead		
Mercury		

6. Did the facility notify the RA that he is growing food chain crops? ___yes___no

7. Is the following information kept at the facility? ___yes___no

a. Tests for the specific wastes and application rates being used at the facility? ___yes___no
b. Crop characteristics? ___yes___no
c. Soil characteristics? ___yes___no
d. Sample selection criteria? ___yes___no
e. Sample size determination? ___yes___no
f. Analytical methods used? ___yes___no
g. Statistical procedures? ___yes___no

8. Does the facility treat waste that contains cadmium? ___yes___no

a. If no, do not fill out b&c

b. If yes, was the pH of the soil and waste mixture 6.5 or greater at the time of each waste application? ___yes___no

(1) If the pH was less than 6.5, did the waste contain cadmium concentrations of 2mg/Kg or less? ___yes___no

c. Is the annual application rate of cadmium less than 0.5 Kg/ha (Kilograms per hectare) for the following: tobacco, leafy vegetables, or root crops grown for human consumption ___yes___no

(1) For all other food chain crops, is the annual cadmium application rate less than 2.0 Kg/ha (Until 6/30/84) ___yes___no

265.278 9. Is an unsaturated zone monitoring plan kept at the facility? ___yes___no

10. Does the plan include:

a.	Soil monitoring	____yes___no
b.	Soil pore water monitoring	____yes___no
c.	Sample depths below waste incorporation	____yes___no
d.	Number of samples to be taken	____yes___no
e.	Frequency and time of sampling	____yes___no
f.	Analysis of samples	____yes___no

265.279 11. Are records kept at the facility of

a.	Application dates	____yes___no
b.	Application rates	____yes___no
c.	Quantities	____yes___no
d.	Waste location	____yes___no

265.280 12. Is a copy of the closure/post-closure plan kept at the facility? ____yes___no
(Effective May 19, 1981)

265.281 13. Are ignitable or reactive wastes placed in the facility? ____yes___no

a. If yes, are the wastes treated, rendered or mixed before or immediately after placement in the landfill so it is no longer reactive or ignitable?

____yes___no

b. Describe or attach a copy of treatment.

14. Are incompatible wastes placed in the facility? ____yes___no

a. Are the incompatible waste placed in different locations in the facility? ____yes___no

Subpart

N

LANDFILLS CHECKLIST

.265.302

1. Is run-on diverted from the landfill? (Effective November 19, 1981) ____yes__no

2. Is run-off from the landfill collected? (Effective November 19, 1981) ____yes__no

   a. Is this waste analyzed to determine if it is a hazardous waste? ____yes__no

   (1) If it is a hazardous waste, how is it managed? (Use narrative explanations sheet)

   (2) Is the collected run-off discharged through a point source to surface waters? ____yes__no

      (a) If yes, list NPDES Permit Number_____

3. Is the landfill managed so that wind dispersal is controlled? ____yes__no (Note blowing debris)

4. Is the following information maintained in the operating record? ____yes__no

5. Are reactive or ignitable wastes placed in the landfill? ____yes__no

   a. If yes, is it treated, rendered or mixed before or immediately after placement in the landfill so it is no longer reactive or ignitable? ____yes__no

   b. Describe treatment, etc, or attach a copy of treatment.

6. Are incompatible wastes placed in the same landfill? ____yes__no

7. Are bulk or non-containerized liquid wastes or wastes containing free liquids placed in the landfill? (Effective November 19, 1981) ____yes__no

   a. If yes, does the landfill have
      (1) A chemically and physically resistant liner? ____yes__no
      (2) Functioning leachate collection and removal system? ____yes__no

      or

   b. 1. Is the liquid waste treated chemically or physically so that free liquids are no longer present? (Effective November 19, 1981) ____yes__no

265.314 8. Are containers holding liquid wastes placed in the landfill? ___yes___no

a. If yes, is the container designed to hold liquids for a use other than storage? (eg battery, capacitor) ___yes___no
(Effective November 19, 1981)

265.315 9. Are empty containers placed in the landfill? ___yes___no

a. If yes, are they reduced in volume (eg shredded, crushed)? ___yes___no
(Effective November 19, 1981)

10. Is there evidence of site instability? (e.g. erosion, settling)? ___yes___no
(Use narrative explanations sheet)

11. Is there evidence of ponding of water on-site? ___yes___no
(Use narrative explanation sheet)

12. Is there any indication of improper or inadequate drainage? ___yes___no
(Use narrative explanations sheet)

265.310 13. Does the facility maintain closure and post-closure plans? ___yes___no

Subpart

O

INCINERATORS CHECKLIST

265.343 1. Is the incinerator operating at steady state conditions (temperature and air flow) before adding hazardous waste? ____yes__no

265.345 2. Is a waste analysis documented on the operating record that includes:

a. Heating value ____yes__no
b. Halogen content ____yes__no
c. Sulfur content ____yes__no
d. Concentration of lead ____yes__no
e. Concentration of mercury ____yes__no

(Note: D&E not required if facility has written documented data that show the elements are not present.

265.347 3. Does the owner/operator monitor the following when incinerating hazardous waste?

a. At least every 15 minutes, existing instruments which relate to combustion and emission control including:

(1) Waste feed ____yes__no
(2) Auxiliary fuel feed ____yes__no
(3) Air flow ____yes__no
(4) Incinerator temperature ____yes__no
(5) Scrubber flow ____yes__no
(6) Scrubber pH ____yes__no
(7) Relevant level controls ____yes__no

b. Stack plume (emissions) at least hourly for:

(1) Color (normal) ____yes__no
(2) Opacity ____yes__no

c. Incinerator and associated equipment at least daily including:

(1) Pumps, valves, conveyors, pipes for leaks, spills, and fugitive emissions (Use narrative explanations sheet) ____yes__no
(2) Emergency shutdown controls ____yes__no
(3) System alarms ____yes__no

265.351 4. Is a closure plan maintained at the facility? ____yes__no
(Effective May 19, 1981)

NOTE: Applies to thermal treatment of hazardous waste in devices other than incinerators.

265.373 1. Is the process a non-continuous (batch) process? ____yes__no

a. If no, is the process operating at steady state conditions (including temperature) before adding hazardous waste? ____yes__no

265.375 b. Is a waste analysis documented in the operating record that includes

1. Heating value ____yes__no
2. Halogen content ____yes__no
3. Sulfur content ____yes__no
4. Concentration of lead ____yes__no
5. Concentration of mercury ____yes__no

NOTE: 4&5 not required if facility has written documented data that show the elements are not present)

265.377 2. Does the owner/operator monitor the following when thermally treating hazardous wastes? ____yes__no

a. At least every 15 minutes, existing instruments which relate to temperature and emission control:

1. Waste feed ____yes__no
2. Auxiliary fuel feed ____yes__no
3. Treatment process temperature ____yes__no
4. Relevant process flow ____yes__no
5. Relevant level controls ____yes__no

b. Stack plume (emissions) at least hourly:

1. Color (normal) ____yes__no
2. Opacity ____yes__no

c. Thermal treatment process equipment at least daily

1. Pumps, valves, conveyors, pipes, etc - for leaks, spills and fugitive emissions? ____yes__no
2. Emergency shutdown controls? ____yes__no
3. System alarms ____yes__no

265.381 3. Is a closure plan maintained at the facility? (Effective May 19, 1981) ___yes___no

265.382 4. Is there evidence of any open burning of hazardous waste? (Use narrative explanations sheet) ___yes___no

5. Is open burning or detonation of waste explosives conducted? ___yes___no

a. If yes, is the detonation performed in accordance with the following table? ___yes___no

Pounds of waste explosives or propellants	Minimum distance from open burning or detonation to the property of others
0-100	204m(670 ft)
101-1,000	380m(1,250 ft)
1,001-10,000	530m(1,730 ft)
10,001-30,000	690m(2,260 ft)

Subpart

Q

CHEMICAL, PHYSICAL & BIOLOGICAL TREATMENT CHECKLIST

Sludge centrifuge for dewatering

NOTE: Applies to treatment in other than tanks, surface impoundments, and land treatment facilities.

265.401 1. Check treatment process and equipment:

a. Are there any leaks, corrosion or other failures evident? X yes ___ no
If yes, describe. Sludge/dirt all over the floor & the building holding the centrifuge

2. Is the process a continous feed system? ___ yes X no

a. If yes, is it equipped with a means to stop waste inflow (e.g. waste feed cut-off system or by-pass)? ___ yes ___ no NA

265.402 3. Is waste analysis information maintained in the operating record? X yes ___ no

4. If a hazardous waste is received which is substantially different from any hazardous waste previously treated at the facility, are the following obtained? NA ___ yes ___ no

a. Waste analyses and trial treatment tests (eg bench scale)? ___ yes ___ no NA
b. Written documented information on similar treatment of similar waste? ___ yes ___ no NA

265.403 5. Does the owner/operator inspect the following, where present? ___ yes X no

a. At least daily.
1. Discharge control and safety equipment (eg waste feed cut-off, by-pass, drainage or pressure relief systems)? ___ yes X no

2. Data gathered from monitoring equipment (eg pressure and temperature gauges)? ___ yes ___ no NA

b. At least weekly.
1. Construction materials of treatment process or equipment to detect erosion or obvious signs of leakage? ___ yes X no

6. Does the facility maintain a closure plan? (Effective May 19, 1981) Closure plan does not include centrifuge. ___ yes X no

265.405 7. Are ignitable or reactive wastes placed in the treatment process? ___ yes X no

a. If yes, is the waste treated, rendered or mixed before or immediately after being placed in the treatment process so it no longer meets the definition of ignitable or reactive? ___ yes ___ no NA
Describe or attach a copy of the treatment.

PHOTO #1

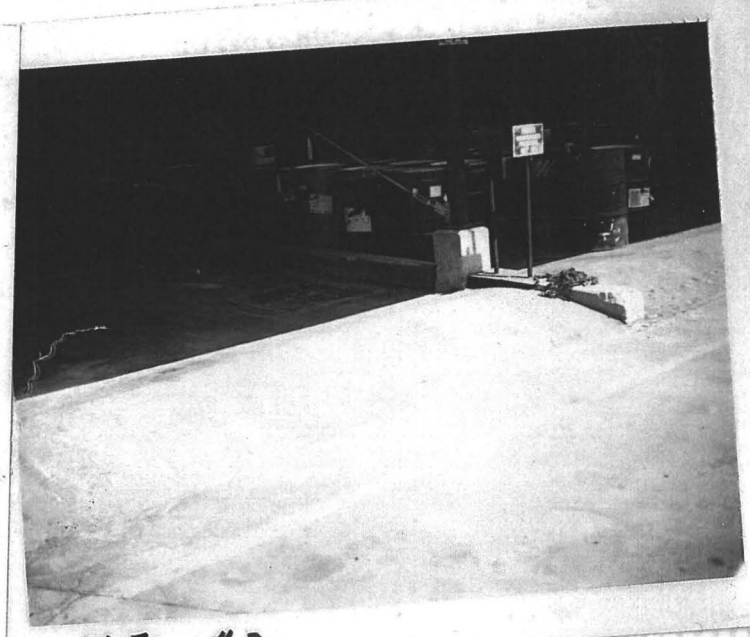


PHOTO #2

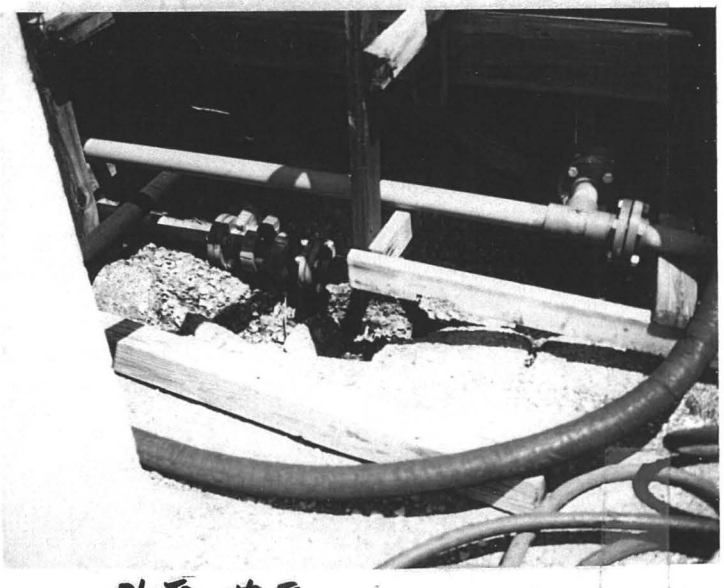
PHOTO #3

PHOTO #4

PHOTO #5

PHOTO #6

PHOTO #7



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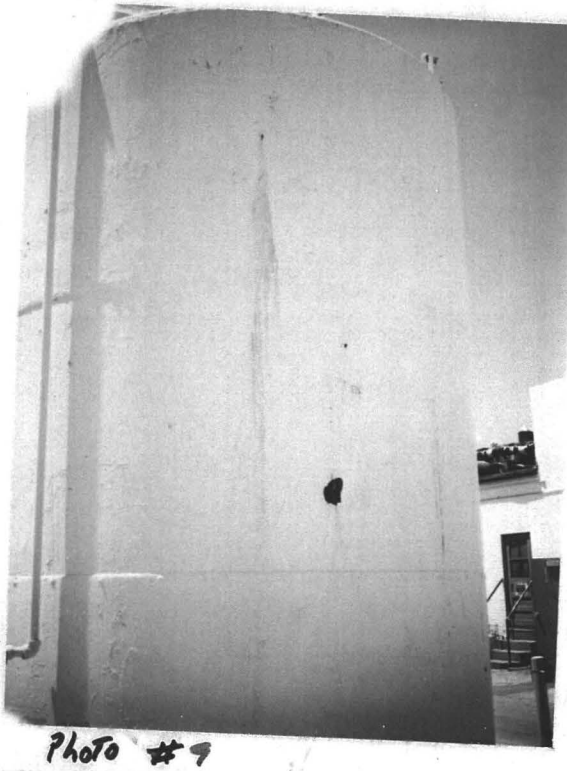

PHOTO #9

PHOTO #10